```
 * * * * * * * * *   Welcome to STN International   * * * * * * * * * *
 * * * * * * * * * * * * * * STN  Columbus  * * * * * * * * * * * * * *

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=> Uploading C:\Program Files\Stnexp\Queries\Queries\105789532nd.str
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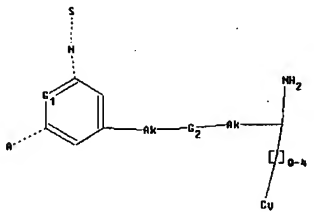

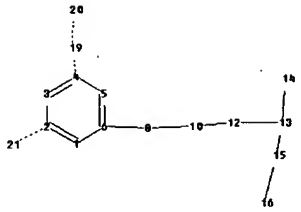

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chain nodes :
8  10  12  13  14  15  16  19  20  21
ring nodes :
1  2  3  4  5  6
chain bonds :
2-21  4-19  6-8  8-10  10-12  12-13  13-14  13-15  15-16  19-20
ring bonds :
1-2  1-6  2-3  3-4  4-5  5-6
exact/norm bonds :
1-2  1-6  2-3  2-21  3-4  4-5  4-19  5-6  6-8  8-10  10-12  12-13  13-14  13-15
15-16  19-20
isolated ring systems :
containing 1 :


G1:C,N

G2:O,N

Match level :
1:Atom  2:Atom  3:Atom  4:Atom  5:Atom  6:Atom  8:CLASS  10:CLASS  12:CLASS
13:CLASS  14:CLASS  15:CLASS  16:Atom  19:CLASS  20:CLASS  21:CLASS
Generic attributes :
16:
Saturation              : Unsaturated




L4       STRUCTURE UPLOADED

=> dis l4
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L4                STR
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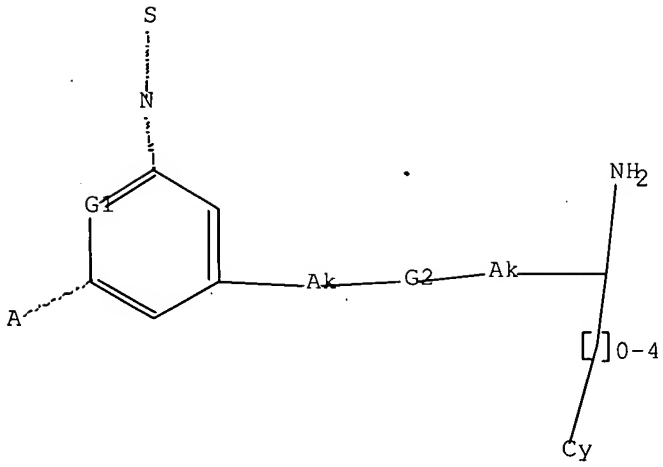

G1 C,N
G2 O,N

Structure attributes must be viewed using STN Express query preparation.

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=> s l4 full
L7            61 SEA SSS FUL L4

=> file caplus

=> s l7
L8             8 L7

=> s l8 and pd < nov 2003
      23834136 PD < NOV 2003
                 (PD<20031100)
L9             0 L8 AND PD < NOV 2003

=> dis  l8 1-8 bib abs fhitstr

L8   ANSWER 1 OF 8  CAPLUS  COPYRIGHT 2007 ACS on STN
AN   2006:1191598  CAPLUS  Full-text
DN   146:116781
TI   Discovery of Oxadiazoyl Tertiary Carbinamine Inhibitors of
     β-Secretase (BACE-1)
AU   Rajapakse, Hemaka A.; Nantermet, Philippe G.; Selnick, Harold G.; Munshi,
     Sanjeev; McGaughey, Georgia B.; Lindsley, Stacey R.; Young, Mary Beth;
     Lai, Ming-Tain; Espeseth, Amy S.; Shi, Xiao-Ping; Colussi, Dennis;
     Pietrak, Beth; Crouthamel, Ming-Chih; Tugusheva, Katherine; Huang, Qian;
     Xu, Min; Simon, Adam J.; Kuo, Lawrence; Hazuda, Daria J.; Graham, Samuel;
     Vacca, Joseph P.
CS   Departments of Medicinal Chemistry, Structural Biology, Molecular Systems
     and Alzheimer's Research, Merck Research Laboratories, West Point, PA,
     19486, USA
SO   Journal of Medicinal Chemistry (2006), 49(25), 7270-7273
     CODEN: JMCMAR; ISSN: 0022-2623
PB   American Chemical Society
```
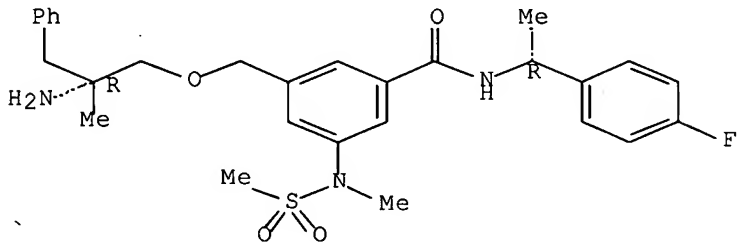

DT Journal
LA English
OS CASREACT 146:116781
AB We describe the discovery and optimization of tertiary carbinamine derived inhibitors of the enzyme β-secretase (BACE-1). These novel non-transition-state-derived ligands incorporate a single primary amine to interact with the catalytic aspartates of the target enzyme. Optimization of this series provided inhibitors with intrinsic and functional potency comparable to evolved transition state isostere derived inhibitors of BACE-1.
IT 905283-14-9
RL: BSU (Biological study, unclassified); PRP (Properties); BIOL (Biological study)
(discovery of oxadiazoyl tertiary carbinamine inhibitors of β-secretase)
RN 905283-14-9 CAPLUS
CN Benzamide, 3-[[(2R)-2-amino-2-methyl-3-phenylpropoxy]methyl]-N-[(1R)-1-(4-fluorophenyl)ethyl]-5-[methyl(methylsulfonyl)amino]- (CA INDEX NAME)

Absolute stereochemistry.



RE.CNT 28 THERE ARE 28 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L8 ANSWER 2 OF 8 CAPLUS COPYRIGHT 2007 ACS on STN
AN 2006:511287 CAPLUS Full-text
DN 145:28030
TI Macrocyclic aminopyridyl β-secretase inhibitors for the treatment of Alzheimer's disease
IN Rajapakse, Hemaka A.; Nantermet, Philippe G.; Selnick, Harold G.; Moore, Keith P.
PA Merck & Co., Inc., USA
SO PCT Int. Appl., 76 pp.
CODEN: PIXXD2
DT Patent
LA English
FAN.CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI WO 2006057983	A1	20060601	WO 2005-US42233	20051118

W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KM, KN, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, LY, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NG, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SM, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW
RW: AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, LV, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ,

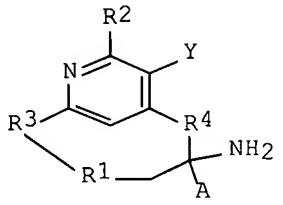
CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG, BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM

AU 2005309708 A1 20060601 AU 2005-309708 20051118
CA 2587256 A1 20060601 CA 2005-2587256 20051118
EP 1817312 A1 20070815 EP 2005-849049 20051118
R: AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LI, LT, LU, LV, MC, NL, PL, PT, RO, SE, SI, SK, TR

PRAI US 2004-630319P P 20041123
WO 2005-US42233 W 20051118

OS MARPAT 145:28030

GI



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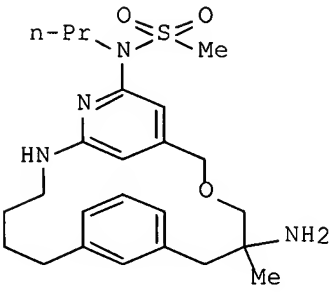
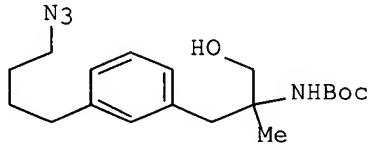


II



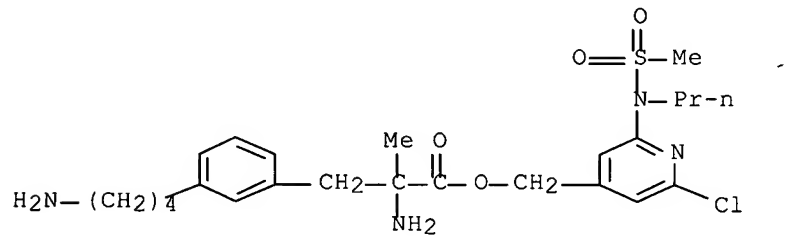
III

AB The present invention is directed to preparation of macrocyclic aminopyridyl compds. I [Y = H, halo, CN, alkyl or haloalkyl; A = H, (un)substituted-alkyl, -alkenyl, -alkynyl; R1 = (un)substituted arylene or heteroarylene; R2 = H, CF3, (un)substituted heteroaryl, etc.; R3 = substituted aliphatic or heteroalkyl bridging moiety; R4 = (un)substituted aliphatic or heteroalkyl bridging moiety], and their pharmaceutically acceptable salts, which are inhibitors of the β-secretase enzyme and that are useful in the treatment of diseases in which the β-secretase enzyme is involved, such as Alzheimer's disease. Thus, e.g., II was prepared by substitution of N-[4-(bromomethyl)-6-chloropyridin-2-yl]-N- propylmethanesulfonamide (preparation given) with intermediate III (preparation given) followed by Staudinger reduction, macroamination and deprotection. I had activity in inhibiting the β-secretase enzyme generally within an IC50 range of 1 nM to 100 μM. The invention is also directed to pharmaceutical compns. comprising these compds. and the use of these compds. and compns. in the treatment of such diseases in which the β-secretase enzyme is involved.

IT 888703-14-8P
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(preparation of heteromacrocyclic aminopyridyl β-secretase inhibitors)

RN 888703-14-8 CAPLUS

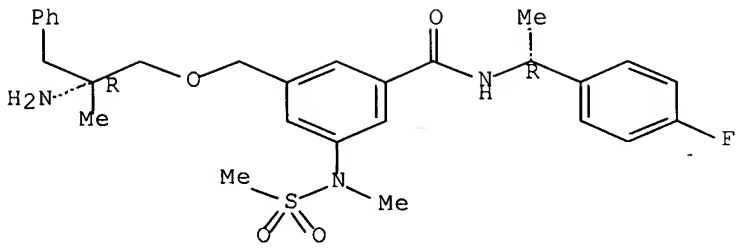
CN Phenylalanine, 3-(4-aminobutyl)-α-methyl-, [2-chloro-6-[(methylsulfonyl)propylamino]-4-pyridinyl]methyl ester (9CI) (CA INDEX NAME)



RE.CNT 1 THERE ARE 1 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L8 ANSWER 3 OF 8 CAPLUS COPYRIGHT 2007 ACS on STN
AN 2006:502466 CAPLUS Full-text
DN 145:224304
TI Computational approaches to the prediction of blood-brain barrier permeability: a comparative analysis of central nervous system drugs versus secretase inhibitors for Alzheimer's disease
AU Rishton, Gilbert M.; LaBonte, Kristen; Williams, Antony J.; Kassam, Karim; Kolovanov, Eduard
CS Channel Islands Alzheimer's Institute, California State University Channel Islands, Camarillo, CA, 93012, USA
SO Current Opinion in Drug Discovery & Development (2006), 9(3), 303-313
CODEN: CODDFF; ISSN: 1367-6733
PB Thomson Scientific
DT Journal
LA English
AB This review summarizes progress made in the development of fully computational approaches to the prediction of blood-brain barrier (BBB) permeability of small mols., with a focus on rapid computational methods suitable for the anal. of large compound sets and virtual screening. A comparative anal. using the recently developed Advanced Chemical Development (ACD/Labs) Inc BBB permeability algorithm for the calcn. of logBB values for known Alzheimer's disease medicines, selected central nervous system drugs and new secretase inhibitors for Alzheimer's disease, is presented. The trends in logBB values and the associated physiochem. properties of these agents as they relate to the potential for BBB permeability are also discussed.
IT 905283-14-9
RL: BSU (Biological study, unclassified); PRP (Properties); BIOL (Biological study)
(computational approaches to prediction of blood-brain barrier permeability and comparative anal. of central nervous system drugs vs. secretase inhibitors for Alzheimer's disease)
RN 905283-14-9 CAPLUS
CN Benzamide, 3-[[(2R)-2-amino-2-methyl-3-phenylpropoxy]methyl]-N-[(1R)-1-(4-fluorophenyl)ethyl]-5-[methyl(methylsulfonyl)amino]- (CA INDEX NAME)

Absolute stereochemistry.



RE.CNT 77 THERE ARE 77 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L8 ANSWER 4 OF 8 CAPLUS COPYRIGHT 2007 ACS on STN
AN 2005:638626 CAPLUS Full-text
DN 143:153293
TI Preparation of phenylamides and pyridylamides as β-secretase inhibitors
IN Barrow, James C.; Coburn, Craig A.; Nantermet, Philippe G.; Selnick, Harold G.; Stachel, Shawn J.; Stanton, Matthew G.; Stauffer, Shaun R.; Zhuang, Linghang; Davis, Jennifer R.
PA Merck & Co., Inc., USA
SO PCT Int. Appl., 121 pp.
CODEN: PIXXD2
DT Patent
LA English
FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 2005065195	A2	20050721	WO 2004-US42173	20041215
	WO 2005065195	A3	20060406		
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	RW: BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG				
	AU 2004311749	A1	20050721	AU 2004-311749	20041215
	CA 2548849	A1	20050721	CA 2004-2548849	20041215
	EP 1697308	A2	20060906	EP 2004-814367	20041215
	R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, HU, PL, SK, BA, HR, IS, YU				
	CN 1898199	A	20070117	CN 2004-80038063	20041215
	JP 2007517781	T	20070705	JP 2006-545405	20041215
	IN 2006DN02139	A	20070629	IN 2006-DN2139	20060419
	US 2007142634	A1	20070621	US 2006-582856	20060614
PRAI	US 2003-531423P	P	20031219		
	WO 2004-US42173	W	20041215		

OS MARPAT 143:153293
GI

* STRUCTURE DIAGRAM TOO LARGE FOR DISPLAY - AVAILABLE VIA OFFLINE PRINT *

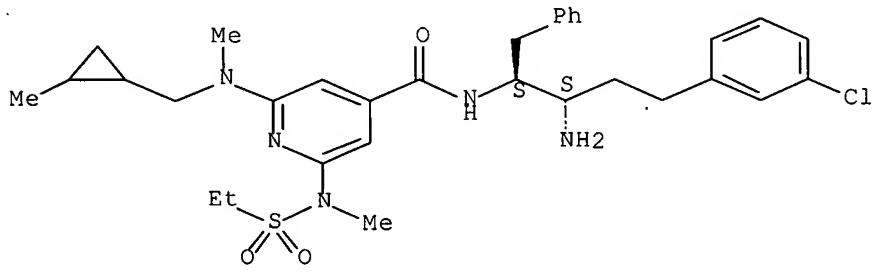
AB Title compds. I [Y = CH or N; Q1 = OH or NH2; Q2 and Q3 independently = H or halo; Ra = H, cycloalkyl, (un)substituted alkyl; Rb = H, (un)substituted alkyl, cycloalkyl, etc.; m = 1-2; R1 = (un)substituted aryl, heteroaryl, alkyl, etc.; R2 = (R4-SO2)N(R5); R3 = R6R7CHNHCO; R8R9NCO; R10R11N, etc.; R4 = (un)substituted alkyl, cycloalkyl, heteroaryl, etc.; R5 = H, (un)substituted alkyl, aryl, etc., or R4 and R5 together form sulfurheterocycle containing optionally one more nitrogen atom; R6 = alkyl or perfluoroalkyl; R7 = (un)substituted aryl or pyridyl; R8 and R9 independently = H, (un)substituted alkyl, cycloalkyl, or R8 and R9 together with the nitrogen atom to which they are attached form (un)substituted heterocycle; R10 = (un)substituted alkyl, cycloalkyl, -(CH2)x-Ph, etc.; x = 1-4; R11 = H, (un)substituted alkyl, cycloalkyl] and their pharmaceutically acceptable salts, are prepared and disclosed as β-secretase inhibitors. Thus, e.g., II was prepared by amidation of 2-{[(2-methylcyclopropyl)methyl]amino}-6-[methyl(methylsulfonyl)amino]isonicotinic acid (preparation given) with (2S,3S)-3-azido-1-phenylheptan-2-amine (preparation given) and subsequent reduction The activity of I was evaluated in a homogeneous end point fluorescence resonance energy transfer (FRET) assay and it was revealed that compds. of the invention generally had an inhibitory capability towards β-secretase enzyme with an IC50 value from about 1 nM to 100 μM. I as β-secretase inhibitors should prove useful in the treatment of Alzheimer's disease. Pharmaceutical compns. comprising I are disclosed.

IT 860312-10-3P
RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(preparation of phenylamides and pyridylamides as β-secretase inhibitors)

RN 860312-10-3 CAPLUS

CN 4-Pyridinecarboxamide, N-[(1S,2S)-2-amino-4-(3-chlorophenyl)-1-(phenylmethyl)butyl]-2-[(ethylsulfonyl)methylamino]-6-[methyl[(2-methylcyclopropyl)methyl]amino]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



L8 ANSWER 5 OF 8 CAPLUS COPYRIGHT 2007 ACS on STN

AN 2005:493588 CAPLUS Full-text

DN 143:43693

TI Preparation of benzyl ethers, benzylamines, pyridylmethyl ethers, and pyridylmethylamines as β-secretase inhibitors for the treatment of Alzheimer's disease.

IN Nantermet, Philippe G.; Rajapakse, Hemaka A.; Selnick, Harold G.; Stauffer, Shaun R.; Young, Mary Beth

PA Merck & Co., Inc., USA
SO PCT Int. Appl., 98 pp.
CODEN: PIXXD2
DT Patent
LA English
FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 2005051914	A1	20050609	WO 2004-US38927	20041119
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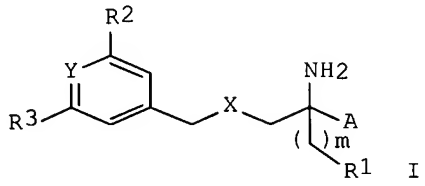
	RW: BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG				
	AU 2004293416	A1	20050609	AU 2004-293416	20041119
	CA 2546142	A1	20050609	CA 2004-2546142	20041119
	EP 1689713	A1	20060816	EP 2004-811618	20041119
	R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, CY, TR, BG, CZ, EE, HU, PL, SK, IS				
	CN 1882544	A	20061220	CN 2004-80034516	20041119
	JP 2007515404	T	20070614	JP 2006-541431	20041119
	IN 2006DN01893	A	20070803	IN 2006-DN1893	20060407
	US 2007088165	A1	20070419	US 2006-578953	20060510
PRAI	US 2003-524454P	P	20031124		
	US 2004-570239P	P	20040512		
	US 2004-602434P	P	20040818		
	WO 2004-US38927	W	20041119		

OS MARPAT 143:43693
GI



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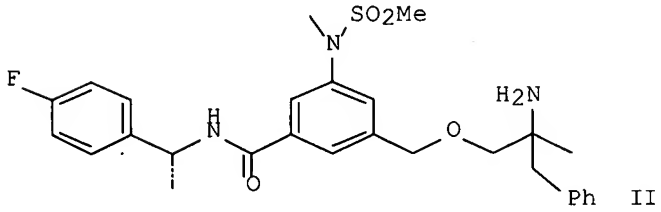


II

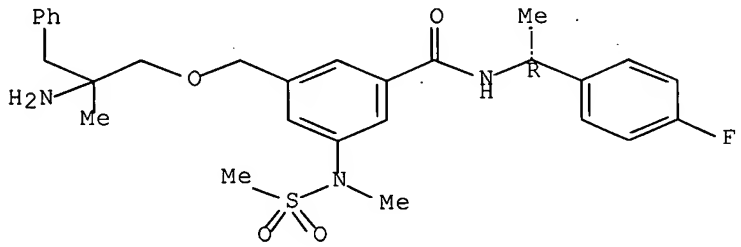
AB Title compds. [I; X = O, NH; Y = N, CH; A = H, (substituted) alkyl, alkenyl, alkynyl; R1 = (substituted) Ph, naphthyl, pyrazinyl, pyrazolyl, pyridazinyl, pyridyl, pyrimidinyl, pyrrolyl, tetrazolyl, furyl, imidazolyl, triazinyl, pyranyl, thiazolyl, thienyl, triazolyl, indolyl, quinolinyl, benzimidazolyl,

etc.; R2 = R4SO2NR7; R4 = (substituted) alkyl, alkenyl, alkynyl, cycloalkyl; R7 = H, (substituted) alkyl, alkenyl, alkynyl; R3 = (substituted) aminocarbonyl, cyclopropylethenyl, etc.; m = 0-3], were prepared Thus, 2-amino-2-methyl-3-phenylpropan-1-ol (preparation given) in DMF at 0° was treated with NaN(SiMe3)2 in THF and then with 3-bromomethyl-N-[(1R)-1-(4-fluorophenyl)ethyl]-5- [methyl(methylsulfonyl)amino]benzamide (preparation given) in DMF followed by stirring for 0.5 h to give title compound (II). I inhibited β-secretase with IC50 = 1 nM-100 μM.

IT 853303-41-0P
RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(claimed compound; preparation of benzyl ethers, benzylamines, pyridylmethyl ethers, and pyridylmethylamines as β-secretase inhibitors for treatment of Alzheimer's disease)

RN 853303-41-0 CAPLUS
CN Benzamide, 3-[(2-amino-2-methyl-3-phenylpropoxy)methyl]-N-[(1R)-1-(4-fluorophenyl)ethyl]-5-[methyl(methylsulfonyl)amino]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



RE.CNT 1 THERE ARE 1 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L8 ANSWER 6 OF 8 CAPLUS COPYRIGHT 2007 ACS on STN
AN 2005:324002 CAPLUS Full-text
DN 142:373552
TI Benzyl ethers and benzylamines as beta-secretase inhibitors, their preparation and use for the treatment of Alzheimer's disease
IN Nantermet, Philippe G.; Rajapakse, Hemaka Anthony; Selnick, Harold G.
PA Merck & Co., Inc., USA
SO PCT Int. Appl., 47 pp.
CODEN: PIXXD2
DT Patent
LA English
FAN.CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI WO 2005032471	A2	20050414	WO 2004-US32009	20040929
WO 2005032471	A3	20050707		

W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW

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	AU 2004277981	A1	20050414	AU 2004-277981	20040929
	CA 2540452	A1	20050414	CA 2004-2540452	20040929
	EP 1673078	A2	20060628	EP 2004-789263	20040929
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	CN 1859904	A	20061108	CN 2004-80028599	20040929
	JP 2007507515	T	20070329	JP 2006-534062	20040929
	IN 2006DN01546	A	20070810	IN 2006-DN1546	20060322
	US 2006293380	A1	20061228	US 2006-573232	20060323
PRAI	US 2003-508369P	P	20031003		
	WO 2004-US32009	W	20040929		

OS MARPAT 142:373552

GI

* STRUCTURE DIAGRAM TOO LARGE FOR DISPLAY - AVAILABLE VIA OFFLINE PRINT *

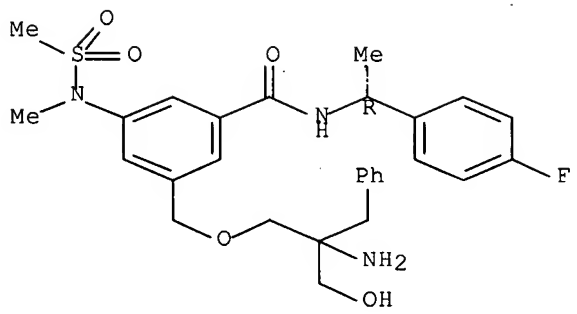
AB The invention relates to a group of benzyl ethers and benzylamines I which are inhibitors of the beta-secretase enzyme. In compds. I, X is O or NH; Y is CH or N; R1 is selected from aryl, arylmethyl, heterocyclyl, and heterocyclylmethyl, wherein the ring is unsubstituted or substituted with one or more substituents selected from halo, OH, C1-6 alkyl, C2-6 alkenyl, C2-6 alkynyl, cyano, and C1-6 alkoxy; R2 is selected from alkyl(alkylsulfonyl)amino, (alkylsulfonyl)amino, o-cyanophenyl, and, gem-cyanocycloalkyl; R3 is selected from (un)substituted (arylalkyl)aminocarbonyl, aminocarbonyl, alkylaminocarbonyl, cyclopropylethenyl, cyclopropylmethyloxy, and cyclopropylmethylamino; and includes all pharmaceutically acceptable salts. The invention also relates to the preparation of I, pharmaceutical compns. comprising these compds. and a pharmaceutically acceptable carrier, and the use of these compds. and compns. in the treatment of diseases in which the beta-secretase enzyme is involved, such as Alzheimer's disease. N-Methylsulfonylation of di-Me 5-aminoisophthalate, followed by N-methylation, gave II, which was partially hydrolyzed and coupled with a chiral amine to give III. Hydrolysis of III followed by borane reduction, bromination, and substitution with 2-amino-2-benzylpropane-1,3-diol, prepared by reduction of racemic α-benzylserine, resulted in the formation of IV. The compds. of the invention inhibit the beta-secretase enzyme, generally with IC50 values from about 1 nM to 100 μM.

IT 849622-98-6P, 3-[(2-Amino-2-benzyl-3-hydroxypropoxy)methyl]-N-[(1R)-1-(4-fluorophenyl)ethyl]-5-[methyl(methylsulfonyl)amino]benzamide
RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(drug candidate; preparation of benzyl ethers and benzylamines as beta-secretase inhibitors for the treatment of Alzheimer's disease)

RN 849622-98-6 CAPLUS

CN Benzamide, 3-[[2-amino-2-(hydroxymethyl)-3-phenylpropoxy]methyl]-N-[(1R)-1-(4-fluorophenyl)ethyl]-5-[methyl(methylsulfonyl)amino]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



L8 ANSWER 7 OF 8 CAPLUS COPYRIGHT 2007 ACS on STN
AN 2005:55021 CAPLUS Full-text
DN 142:134323
TI Preparation of phenylcarboxylate esters as β-secretase inhibitors for the treatment of Alzheimer's disease
IN Nantermet, Philippe G.; Rajapakse, Hemaka Anthony; Selnick, Harold G.
PA Merck & Co., Inc., USA
SO PCT Int. Appl., 35 pp.
CODEN: PIXXD2
DT Patent
LA English
FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 2005004803	A2	20050120	WO 2004-US20525	20040625
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	CA 2530006	A1	20050120	CA 2004-2530006	20040625
	EP 1643986	A2	20060412	EP 2004-756168	20040625
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	JP 2007522088	T	20070809	JP 2006-518686	20040625
	US 2006149092	A1	20060706	US 2005-562470	20051222
PRAI	US 2003-484150P	P	20030701		
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OS MARPAT 142:134323
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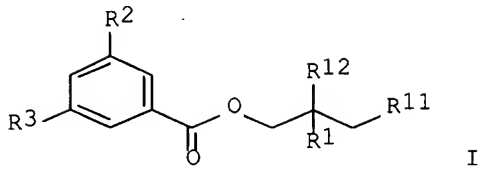

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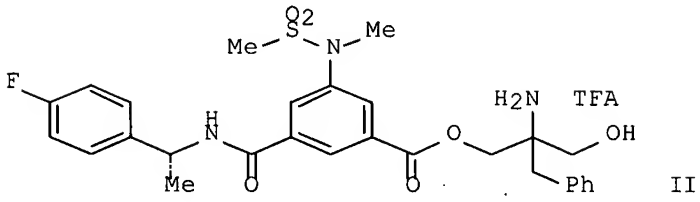


II

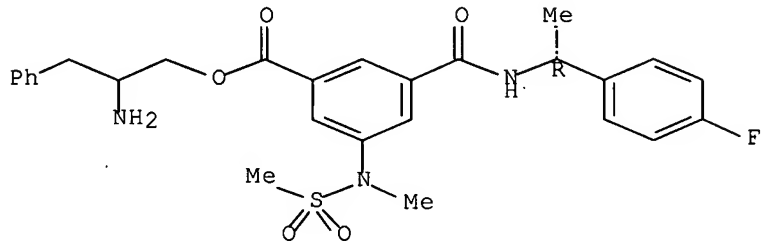
AB Title compds. [I; R1, R5, R9, R10 = H, (substituted) alkyl, alkenyl, alkynyl; R2 = R4SO2NR7, (substituted) Ph; R4 = (substituted) alkyl, alkenyl, alkynyl, Ph, PhCH2; R7 = H, alkyl, alkenyl, alkynyl; R3 = (substituted) PhCHR5NHCO, R9R10NHCO, etc.; R9R10 = atoms to form (substituted) pyrrolidinyl, piperidinyl; R11 = OH, alkoxy, phenylalkoxy, PhO, Ph; R12 = NR9R10, OH], were prepared as β-secretase inhibitors for the treatment of Alzheimer's disease (no data). Title compound (II) was prepared in several steps.

IT 827039-51-0P
RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(claimed compound; preparation of phenylcarboxylate esters as β-secretase inhibitors for the treatment of Alzheimer's disease)

RN 827039-51-0 CAPLUS

CN Benzoic acid, 3-[[[(1R)-1-(4-fluorophenyl)ethyl]amino]carbonyl]-5-[methyl(methylsulfonyl)amino]-, 2-amino-3-phenylpropyl ester (9CI) (CA INDEX NAME)

Absolute stereochemistry.



L8 ANSWER 8 OF 8 CAPLUS COPYRIGHT 2007 ACS on STN

AN 2004:220301 CAPLUS Full-text

DN 140:270550

TI A preparation of 1,3-diamino-2-hydroxypropane derivatives as beta-secretase enzyme inhibitors

IN Fobian, Yvette M.; Freskos, John N.; Jagodzinska, Barbara

PA Elan Pharmaceuticals, Inc., USA; Pharmacia & Upjohn

SO PCT Int. Appl., 535 pp.
CODEN: PIXXD2

DT Patent
LA English
FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 2004022523	A2	20040318	WO 2003-US28116	20030908
	WO 2004022523	A3	20040910		
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	AU 2003268550	A1	20040329	AU 2003-268550	20030908
	US 2004214890	A1	20041028	US 2003-657567	20030908
	EP 1534693	A2	20050601	EP 2003-749520	20030908
	R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, HU, SK				
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	NO 2005001189	A	20050510	NO 2005-1189	20050304
	MX 2005PA02508	A	20050603	MX 2005-PA2508	20050304
	IN 2005KN00441	A	20060127	IN 2005-KN441	20050316
	ZA 2005002755	A	20060222	ZA 2005-2755	20050405
PRAI	US 2002-408783P	P	20020906		
	WO 2003-US28116	W	20030908		

OS MARPAT 140:270550
GI

* STRUCTURE DIAGRAM TOO LARGE FOR DISPLAY - AVAILABLE VIA OFFLINE PRINT *

AB The invention relates to diamino(hydroxy)propane derivs. of formula I [wherein: R1 = -(CH2)1-2-S(O)0-2-(C1-6 alkyl) or (un)substituted (cyclo)alkyl, alk(en/yn)yl, (hetero)aryl, etc.; R2 = H, C1-6 alkyl optionally substituted with 1-3 substituents, (CH2)0-4-(hetero)aryl, C2-6 alk(en/yn)yl, etc.; R3 = H, C1-6 alkyl optionally substituted with 1-3 substituents, (CH2)0-4-(hetero)aryl, etc.; R4 = C1-10 alkyl optionally substituted with 1-3 substituents, -(CH2)0-3-cycloalkyl, -(CR7R8)0-4-(hetero)aryl, etc.; one of R5 and R6 is H and the other is -C(O)(CR9R10)1-6-X-R11, etc.; R7 and R8 are independently selected from H, alkyl, hydroxyalkyl, alk(en/yn)yl, etc.; R9 and R10 are independently selected from H or C1-10 alkyl; R11 = (hetero)aryl, optionally substituted C1-10 alkyl, or C3-8 cycloalkyl, etc.; X = O, S, SO2, etc.]. Compds. I include inhibitors of beta-secretase enzyme useful in the treatment of Alzheimer's disease and other diseases characterized by deposition of A beta-peptide in a mammal. Biol. examples include beta-secretase inhibition, assays using synthetic oligopeptide-substrates, inhibition of A beta production in human patients, etc. For instance, compound II (preparation 8) was prepared via amidation of benzoic acid derivative III by diamino(hydroxy)propane derivative IV and subsequent Boc-cleavage (no yield data). Using 19F-NMR an intramol. acyl-migration was

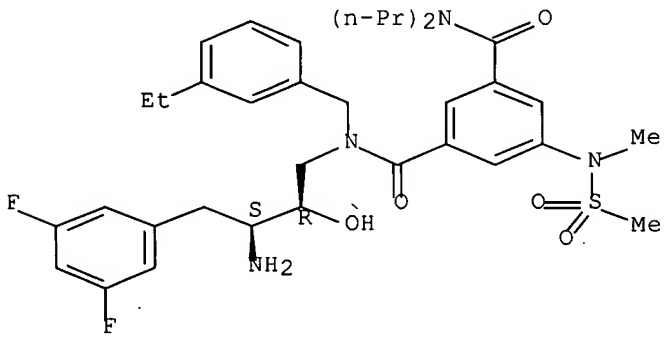
observed when compound II was dissolved in DMSO-d6 and pH 4 buffer solution was added.

IT 674313-67-8P
RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(preparation of diamino(hydroxy)propane derivs. useful as beta-secretase inhibitors)

RN 674313-67-8 CAPLUS

CN 1,3-Benzenedicarboxamide, N-[(2R,3S)-3-amino-4-(3,5-difluorophenyl)-2-hydroxybutyl]-N-[(3-ethylphenyl)methyl]-5-[methyl(methylsulfonyl)amino]-N',N'-dipropyl- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



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